

§ 25.219

47 CFR Ch. I (10–1–13 Edition)

24–25log ₁₀ θ	dBW/4 kHz	For	3° ≤θ ≤48°
– 18	dBW/4 kHz	For	48° <θ ≤180°

where θ is defined in paragraph (c)(2) of this section. For the purposes of this section, the envelope may be exceeded by no more than 10% of the sidelobes provided no individual sidelobe exceeds the envelope given above by more than 6 dB. The region of the main reflector spillover energy is to be interpreted

as a single lobe and shall not exceed the envelope by more than 6 dB.

(h) *Extended Ku-band digital earth station operations.* (1) In the plane of the geostationary satellite orbit as it appears at the particular earth station location:

15–10log ₁₀ (N)–25log ₁₀ θ	dBW/4 kHz	For	1.5° ≤θ ≤7°
– 6–10log ₁₀ (N)	dBW/4 kHz	For	7° <θ ≤9.2°
18–10log ₁₀ (N)–25log ₁₀ θ	dBW/4 kHz	For	9.2° <θ ≤48°
– 24–10log ₁₀ (N)	dBW/4 kHz	For	48° <θ ≤180°

where θ and the plane of the geostationary satellite orbit are defined in paragraph (c)(1) of this section, and N is defined below. For the purposes of this section, the peak EIRP of an individual sidelobe may not exceed the envelope defined above for θ between 1.5° and 7.0°. For θ greater than 7.0°, the envelope may be exceeded by no more than 10% of the sidelobes, provided no individual sidelobe exceeds the envelope given above by more than 3 dB. For digital SCPC using frequency division multiple access (FDMA) or time divi-

sion multiple access (TDMA) technique, N is equal to one. For digital SCPC using code division multiple access (CDMA) technique, N is the maximum number of co-frequency simultaneously transmitting earth stations in the same satellite receiving beam.

(2) In all other directions, or in the plane of the horizon including any out-of-plane potential terrestrial interference paths:

18–10log ₁₀ (N)–25log ₁₀ θ	dBW/4 kHz	For	3° ≤θ ≤48°
– 24–10log ₁₀ (N)	dBW/4 kHz	For	48° <θ ≤85°

where θ is defined in paragraph (c)(2) of this section and N is defined in paragraph (h)(1) of this section. For the purposes of this section, the envelope may be exceeded by no more than 10% of the sidelobes provided no individual sidelobe exceeds the envelope given above by more than 6 dB. The region of the main reflector spillover energy is to be interpreted as a single lobe and shall not exceed the envelope by more than 6 dB.

[73 FR 70902, Nov. 24, 2008, as amended at 74 FR 57099, Nov. 4, 2009; 78 FR 8429, Feb. 6, 2013; 78 FR 14927, Mar. 8, 2013]

EFFECTIVE DATE NOTE: At 74 FR 9962, Mar. 9, 2009, § 25.218, which contains information collection and recordkeeping requirements, became effective with approval by the Office of Management and Budget for a period of three years.

§ 25.219 [Reserved]

§ 25.220 **Non-conforming transmit/receive earth station operations.**

(a)(1) This section applies to earth station applications other than ESV, VMES, ESAA and 17/24 GHz BSS feeder link applications in which the proposed earth station operations do not fall within the applicable off-axis EIRP density envelope specified in § 25.218.

(2) The requirements for petitions to deny applications filed pursuant to this section are set forth in § 25.154.

(b) If an antenna proposed for use by the applicant does not comply with the antenna performance standards contained in § 25.209(a) and (b), the applicant must provide, as an exhibit to its FCC Form 312 application, the antenna gain patterns specified in § 25.132(b).

(c) [Reserved]